

### 651.1 DESCRIPTION

This work consists of constructing sidewalks on a prepared subgrade.

### 651.2 MATERIALS

**A. Concrete:** Concrete for sidewalk shall conform to Class M6 (I28) in Section 462.

**B. Expansion Joint Filler:** Expansion joint filler shall conform to Section 860.

**C. Cushion Material:** Cushion material shall consist of quarry rock, gravel, or sand, crushed or screened to eliminate material retained on a  $\frac{3}{4}$  inch (19.0 mm) sieve. The material shall be free from roots, sod, and lumps of dirt. Not more than 25 percent by weight shall pass a No. 200 (75  $\mu$ m) sieve.

**D. Curing Compound:** Curing compound shall conform to Section 821.

### 651.3 CONSTRUCTION REQUIREMENTS

The foundation shall be excavated, shaped, and compacted to a firm, uniform bearing surface. Unsuitable foundation material shall be removed and replaced as directed. The foundation shall be thoroughly moistened immediately prior to placing concrete.

Cushion material shall be placed to the depth specified and satisfactorily compacted.

Forms shall be made of wood not less than two inches (50 mm) nominal thickness or of steel of equal rigidity. Flexible strips may be used on curves. The forms shall be securely held to line and grade and shall not deviate more than  $\frac{1}{8}$  inch (3 mm) from an accurate template 10 feet (three meters) in length. The forms shall remain in place for not less than 12 hours after concrete placement.

Joint and edging tools shall have an approved  $\frac{1}{4}$  inch (6 mm) radius.

Immediately after the water sheen has disappeared the concrete shall be brushed or broomed to slightly roughen the surface and remove tool marks.

Contraction joints shall be placed at intervals that will provide square sections. The contraction joints shall be formed by a grooving tool or sawing to a depth of at least one third the thickness of the sidewalk. When the sidewalk is 8 feet (3 meters) or greater in width, a longitudinal joint shall be provided at the center.

Expansion joints shall be constructed of  $\frac{1}{2}$  inch (13 mm) Preformed Expansion Joint Filler at a maximum spacing of 100' or at the locations and of the dimensions specified on the plans. When adjacent to buildings, provide a double thickness of Preformed Expansion Joint Filler at the back of the sidewalk. Place  $\frac{1}{2}$  inch (13 mm) Preformed Expansion Joint Filler longitudinally along the backface of the curb and gutter. All other obstructions will require  $\frac{1}{2}$  inch (13 mm) Preformed Expansion Joint Filler, as directed by the Engineer. In areas, where the sidewalk widens at the

bridges, ½ inch (13 mm) Preformed Expansion Joint Filler shall be placed transversely across the sidewalk at the beginning of the transition and adjacent to the bridge sidewalk. The expansion joint filler shall be placed the full depth of the sidewalk.

Concrete sidewalk shall be protected and cured in accordance with Section 460.3, except the minimum curing time shall be 72 hours.

After the curing period, the area adjacent to new sidewalk shall be filled to the required elevation with suitable material. The material shall be compacted to the same degree as the adjacent embankment or ground surface.

#### **651.4 METHOD OF MEASUREMENT**

Concrete sidewalk will be measured to the nearest foot (0.1 meter) and the area computed to the nearest square foot (0.1 square meter).

#### **651.5 BASIS OF PAYMENT**

Concrete sidewalk will be paid for at the contract unit price per square foot (square meter).

Payment will be full compensation for excavation other than removal of existing sidewalk as provided for under Section 110.

Payment will be full compensation for labor, equipment, tools, backfilling, furnishing and placing materials, including granular material, preformed expansion joint material and incidentals necessary, including disposal of excavation and discarded materials.